Groundwater Ordinance Exemption to Minimum Lot Size

In the County's scoping letter dated September 20, 2004 it was requested that the parcel map would be designed in accordance with the minimum parcel size requirement within the Groundwater Ordinance of at least 4 gross acres per parcel. The parcel map received by DPLU indicates that Lot 2 is only 2.89 gross acres, and Lot 4 is 2.68 gross acres. A request was made by the applicant that these lots be considered for exemption from the minimum parcel size within the Groundwater Ordinance. Section 67.750 states that "*the Director may grant an exemption for the requirement for minimum parcel sizes imposed by Section 67.722.A. upon a finding that existing data demonstrate that the finding required by Section 67.722.B. can be made without additional study. Such data may include a recent history (minimum of five years) of groundwater withdrawals or streamflow data and other geomorphic evidence which indicates the replenishment of groundwater resources is rapid and reliable, and is controlled primarily by infiltration of streamflow rather than on-site recharge.*" The finding within Section 67.722.B that must be made is "*that groundwater resources are adequate to meet the demands of the project.*"

The Director shall grant an exemption to the requirement for minimum parcel sizes for these lots per Section 67.750 of the Groundwater Ordinance. The finding within 67.722.B can be made for Lots 2 and 4 based upon the following evidence in support of an exemption to the minimum parcel size of 4-gross acres per parcel:

1. While Lot 2 and 4 are below the required minimum parcel size of 4-acres, the project's overall average density is 5.25 gross acres. This averaged value meets the 4-acre minimum parcel size requirement of the Groundwater Ordinance.
2. The proposed project is located along the Pine Valley Creek, which has a tributary watershed of over 20 square miles and has average precipitation of up to 27 to 30-inches in its upper reaches. Most of the watershed is in public ownership with limited groundwater withdrawals. The sandy creek bed is porous likely allowing for rapid infiltration of surface water. The existing well on Parcel 3 of the project site is located within 50 feet of the creek bed. The data collected from this well indicates rapid infiltration of groundwater from the 2009-2010 wet season as follows:
    i. October 22, 2009: Nearing the end of the dry season, groundwater was measured within the well at a depth of approximately 14.1 feet below the ground surface. Pine Creek was dry as observed during the site visit.
    ii. January 14, 2010: Following heavy precipitation in December, the depth to water was measured at 9.4 feet bgs. Pine Creek was observed to be gently flowing during the site visit.
    iii. January 27, 2010: Following a significant winter storm, the depth to water was measured at 5.0 feet bgs. Pine Creek was observed to have considerable additional flow as compared to the January 14, 2010 site visit.
    iv. March 18, 2010: Nearing the end of the rainy season, the depth to water was measured at 5.2 feet bgs. Pine Creek was observed to be gently flowing during the site visit.

3. DPLU has monitored groundwater levels within a well approximately 1,000-feet north of the project site since 1982. The well is situated approximately 300 feet west of the center of the Pine Creek. The water levels have been relatively stable, with groundwater levels ranging from approximately 6 to 30 feet below the ground surface. The most recent groundwater level within the well measured on March 18, 2010 indicated a depth to water of approximately 11.2 feet below the ground surface. Through a nearly 30 year history, the well provides evidence of rapid recharge during most years during the wet season which is likely attributable from infiltration of water along Pine Creek.
4. According to the property owner, an existing well on Parcel 3 has adequately met the needs of the existing house since 1991. The most recent water level measured within the well measured on March 18, 2010 indicated a depth to water of approximately 5.2 feet below the ground surface. This indicates that groundwater resources are adequate to serve the project on Parcel 3.
5. A 24-hour well test was conducted on Parcel 4 at a rate of 6 gallons per minute (double the normally required 3 gpm) to evaluate whether there appears to be adequate groundwater resources to meet the groundwater demand of both lots. The well was capable of maintaining a flow rate of 6 gpm for 24 hours. Total drawdown during the well test was 112.4 feet. Following production, the water levels recovered rapidly within 60 minutes, indicating no residual drawdown from the well test. Predicted drawdown after five years taking into consideration the production both single-family residences was estimated to be approximately 11.5 feet, well below the County's threshold of 100 feet. This assumes no groundwater recharge over the five year period analyzed.